



Future Force Warrior Cooling System (FFW-CS)

Overview:

The FFW-CS is a lightweight, man-portable, liquid circulating microclimate cooling system, designed to provide heat stress relief to Warfighters wearing Body Armor and/or Chemical/Biological (CB) protective ensembles in desert and jungle environments.

Description:

The FFW-CS chills and circulates cool water through a tube-type heat-transfer garment. The chilled circulating fluid in the tubing network transfers metabolic heat from the Warfighter's body and rejects it to the ambient environment via its condenser.

Specifications:

- **Cooling Power:** ≥ 120 Watts in a 95°F environment
- **Electrical Power Consumption:** ≤ 35 watts (time weighted average)
- **Weight:** 3.5 pounds (excluding power source)
- **Volume:** 1.0 liter
- **Coolant Fluid Temperature:** 77°F
- **Refrigerant:** R134A
- **Cylindrical design**

Status:

The Future Force Warrior Cooling System is being developed under Natick Soldier Center's Microclimate Cooling Program. A fully functional demonstration prototype Cooling System is expected in mid 2008.

Points of Contact

Future Force Warrior

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Rev 11-28-05
PAO 05-256